

Abstract of the Invention

In PCB manufacture, the pads and/or through-holes of a bare board are protected prior to mounting of other components by a silver plating process. The silver plate is applied from a plating composition by a replacement process in which silver ions oxidized copper and deposit a layer of silver at the surface. In the aqueous plating composition the silver ions are maintained in solution by the incorporation of a multidentate complexing agent. The compositions may contain a silver tarnish inhibitor and are free of reducing agent capable of reducing silver ions to silver metal, halide ions and substantially free of non-aqueous solvent. Surface mounted components can be soldered direct to the silver coated contact using any commercially available solder. Silver does not deposit onto solder mask, but only onto metal which is less electropositive than silver.